數學思維與證明的學與教
Learning and Teaching Reasoning-and-Proving

日期：2019 年 6 月 26 日 及 7 月 10 日（星期三）（共兩節）

時間：6:00 pm – 8:30 pm

地點：九龍加士居道 50 號循道中學主樓 M47 室（不設泊車安排）

講者：李鎮揚先生

語言：廣東話（輔以英語）

名額：12 人（費用全免）

Date:　　26 June & 10 July 2019 (Wednesday) (two sessions)

Time:　　6:00 pm – 8:30 pm

Venue:　　Room M47, Main Building, Methodist College, 50 Gascoigne Road, Kowloon.

　　　　　(Parking is **not** available)

Speaker:　Mr. Chun Yeung (Gabriel) LEE

Medium of instruction: Cantonese (supplemented with English)

Quota:　　12 (FREE registration)

內容摘要

此教師發展工作坊提供中學數學教育的思維與證明學與教相關知識。工作坊分兩節：(1) 思維與證明是甚麼？為何需要思維與證明？(2) 思維與證明的學與教框架。工作坊將以參加者主導、活動為本的方式進行。工作坊提供思維與證明的教學框架，以促進教師反思其教學法及預備。參加者將有機會就特定的數學課題利用思維與證明的教學框架以設計其教學，並透過討論進行修改。講員亦將提供不同的個人及合作教學活動，活動皆以日常數學教學內容為設計。

Synopsis

This is a teacher development workshop that provides teachers (of secondary mathematics) with an opportunity to develop their knowledge of learning and teaching reasoning-and-proving in secondary mathematics. The workshop is divided into two sessions: (1) What is reasoning-and-proving? Why reasoning-and-proving? (2) Learning and teaching reasoning-and-proving. It is based upon a learner-centred, task-based learning approach. It enables teachers to reflect on their teaching approaches in secondary mathematics. In addition, this workshop will enhance teachers' preparation for teaching secondary mathematics with the concept of reasoning-and-proving. Given a mathematical task/topic, participants have an opportunity to design their own micro-teaching using the concept of reasoning-and-proving and revise their designs based upon discussion. The instructor provides a wide range of individual and collaborative learning activities based upon realistic teaching situations and aimed at exposing participants to classroom situations, which they will encounter when teaching secondary mathematics.

主講嘉賓

李鎮揚先生（MEd., BSc., PGDE）現於英國牛津大學攻讀哲學博士（教育），為香港檢定教員。曾於香港科技大學主修數學（副修社會科學），後獲香港教育大學教育碩士及教育文憑；教授數學多年，並負責升學及就業輔導組工作。後獲教大卓越學術獎學金（博士課程），留學於英國研究數學教育。研究範圍包括數學證明、數學史、課堂設計與教學策略、教師專業能力與發展、教師教育等。（電郵：chun.lee@education.ox.ac.uk）

About the Instructor

Chun Yeung (Gabriel) LEE is a DPhil candidate in education at the University of Oxford, United Kingdom. Since obtaining his first undergraduate degree in mathematics, he has devoted himself to mathematics education and its research, and had taught at local schools in Hong Kong for years before pursuing his doctoral degree at the University of Oxford. His research interests are in the areas of teaching and learning mathematics, proof-and-proving and history of mathematics, and teacher education. He is currently working on a project studying the development of pedagogies for reasoning-and-proving in the classroom situations. He obtained his PGDE and MEd in mathematics education from The Education University of Hong Kong. (E-mail address: chun.lee@education.ox.ac.uk)

備註

(1) 工作坊將會進行錄音；
(2) 參加者須於工作坊後完成一份問卷；
(3) 【選項】若參加者對是次牛津大學的數學教育研究有興趣的話，可應邀於工作坊前完成另一份問卷，及於工作坊後接受約 1 小時的訪問。完成後將獲牛津大學教育系發出感謝狀以示感謝。

Remarks

(1) The workshop will be audio-recorded;
(2) Participants will be asked to complete a questionnaire after the workshops;
(3) 【OPTIONAL】Participants who would like to participate in a research study approved by the University of Oxford will be asked to complete another questionnaire before the workshops and invited to attend an interview session (~1 hour) after the workshops. Participants taking this option will then receive a certificate of appreciation offered by Department of Education, University of Oxford.

報名方法

有興趣參加者請填寫以下表單報名：https://forms.gle/UUJXvsVxM3MLbDEu7（可掃描以下二維碼）。名額有限，香港數學教育學會會員並會參與以上選項(3)者優先。

Application

Due to limited quota, priority will be given to HKAME members and those taking Option (3) as indicated above. Teachers who are interested in participating, please fill in the form via the following link: https://forms.gle/UUJXvsVxM3MLbDEu7 (by scanning the QR Code shown).